

What is claimed is:

1. A method for treating a mental disorder comprising administering to a mammal having a mental disorder an amount of a SMR1-peptide, or a peptidomimetic thereof, that is sufficient to reduce or eliminate symptoms of the mental disorder.

5 2. The method according to claim 1; wherein said SMR1-peptide comprises an amino acid sequence selected from the amino acid sequences shown in SEQ ID NO. 1, SEQ ID NO. 2, SEQ ID NO. 3, SEQ ID NO. 4, SEQ ID NO. 5, SEQ ID NO. 6, SEQ ID NO. 7, SEQ ID NO. 8, SEQ ID NO. 9, and SEQ ID NO. 10.

10 3. The method according to claim 1 or 2, wherein the mental disorder is an avoidance disorder.

4. The method according to claim 1 or 2, wherein the mental disorder is a decreased awareness disorder.

5. The method according to claim 4; wherein the disorder results from an autistic disorder, or schizophrenia.

15 6. The method according to claim 1 or 2, wherein the mental disorder is an attention deficit/hyperactivity disorder.

7. The method according to claim 1 or 2, wherein the mental disorder is an arousal disorder.

8. The method according to claim 7, wherein the disorder is hospitalism.

20 9. The method according to claim 7, wherein the disorder is decreased interest in environment.

10. The method according to claim 1 or 2; wherein the mental disorder is impaired interpersonal functioning and relationship to the external world.

11. The method according to claim 10, wherein the disorder is schizoid personality disorder.

12. The method according to claim 10, wherein the disorder is schizophrenia or a depressive disorder.

5 13. The method according to claim 1 or 2, wherein the mental disorder is a mood disorder.

14. The method according to claim 13, wherein the disorder is a depressive disorder.

10 15. The method according to claim 1 or 2, wherein the mental disorder is impaired social activity linked to sexuality.

16. The method according to claim 1 or 2, wherein the mental disorder is impaired sexual behavior including untimely ejaculation.

17. The method according to claim 16, wherein the impaired sexual behavior is hypoactive sexual desire disorder.

15 18. The method according to claim 1 or 2, wherein the mental disorder is simple phobia, social phobia, obsessive-compulsive disorder, or acute stress disorder.

19. The method according to claim 1 or 2, wherein the mental disorder is related to a pain disorder.

20 20. The method according to claim 1 or 2, wherein the mental disorder comprises symptoms of more than one mental disorder.

21. The method according to any of claims 1-20, wherein the peptide or peptidomimetic is administered together with a second pharmaceutical agent, wherein the second pharmaceutical agent is present in an amount insufficient to reduce or eliminate symptoms of the mental disorder, and wherein the peptide or peptidomimetic according to

the invention and the second pharmaceutical agent act synergistically to reduce or eliminate symptoms of the mental disorder.

22. The method of any of claims 1-21, wherein the route of administration is selected from parenteral, intranasal, oral, sublingual, transmucosal, intraspiratory, or
5 through an inert or iontophoretic patch.

23. A therapeutic composition comprising a SMR1-peptide or a peptidomimetic thereof, in an amount sufficient to reduce or eliminate symptoms of a mental disorder in a mammal having the mental disorder, and further comprising a pharmaceutically acceptable diluent and/or buffer and/or excipient.

10 24. The therapeutic composition according to claim 23, wherein said SMR1-peptide comprises an amino acid sequence selected from the amino acid sequences shown in SEQ ID NO. 1, SEQ ID NO. 2, SEQ ID NO. 3, SEQ ID NO. 4, SEQ ID NO. 5, SEQ ID NO. 6, SEQ ID NO. 7, SEQ ID NO. 8, SEQ ID NO. 9, and SEQ ID NO. 10.

15 25. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of an avoidance disorder.

26. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of a decreased awareness disorder.

20 27. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of an attention deficit/hyperactivity disorder.

25 28. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of an arousal disorder.

29. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of impaired interpersonal functioning and relationship to the external world.

5 30. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of a mood disorder.

31. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of impaired social activity linked to sexuality.

10 32. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of impaired sexual behavior.

15 33. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of a phobia, an obsessive compulsive disorder or an acute stress disorder.

34. The therapeutic composition according to claim 23 or 24, wherein the therapeutic composition is useful in preparing a medicament for the treatment of symptoms of more than one mental disorder.

20 35. The therapeutic composition according to any of claims 23-34, wherein the peptide or peptidomimetic is present in the therapeutic composition together with a second pharmaceutical agent, wherein the second pharmaceutical agent is present in an amount insufficient to reduce or eliminate symptoms of the mental disorder, and wherein the peptide or peptidomimetic according to the invention and the second pharmaceutical agent act synergistically to reduce or eliminate symptoms of the mental disorder.

25 36. The therapeutic composition of any of claims 23-35, wherein the therapeutic composition is in the form of a solid, a liquid, a gel, an aerosol, or a sustained release formulation.

37. The use of a SMR1-peptide, or a peptidomimetic thereof, for the preparation of a medicament for reducing or eliminating symptoms of a mental disorder in a mammal having the mental disorder.

38. The use according to claim 37, wherein said SMR1-peptide comprises an amino acid sequence selected from the amino acid sequences shown in SEQ ID n° 1, SEQ ID n° 2, SEQ ID n° 3 and SEQ ID n° 4, SEQ ID NO. 5, SEQ ID NO. 6, SEQ ID NO. 7, SEQ ID NO. 8, SEQ ID NO. 9, and SEQ ID NO. 10.

39. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of an avoidance disorder.

40. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of a decreased awareness disorder.

41. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of an attention deficit/hyperactivity disorder.

42. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of an arousal disorder.

43. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of impaired interpersonal functioning and relationship to the external world.

44. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of a mood disorder.

45. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of impaired social activity linked to sexuality.

46. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of impaired sexual behavior.

47. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of a phobia, an obsessive compulsive disorder or an acute stress disorder.

48. The use of a peptide according to claim 37 or 38, for preparing a medicament for the treatment of symptoms of more than one mental disorder.

49. The use of a peptide according to any of claims 37-48, for preparing a medicament, wherein the peptide or peptidomimetic is present together with a second pharmaceutical agent, wherein the second pharmaceutical agent is present in an amount insufficient to reduce or eliminate symptoms of the mental disorder, and wherein the peptide or peptidomimetic according to the invention and the second pharmaceutical agent act synergistically to reduce or eliminate symptoms of the mental disorder.

50. The use of a peptide according to any of claims 37-49, for preparing a medicament in the form of a solid, a liquid, a gel, an aerosol; or a sustained release formulation.